



SARGASSUM OUTBREAKS IN THE CARIBBEAN

What is Sargassum?

There are many different kinds of sargassum. However, there are only two species (Sargassum Fluitans and Sargassum Natans) which are solely pelagic and spend their entire life cycle floating freely at the surface of the Atlantic ocean.



The Caribbean region is seeing sargassum more frequently due to a new source area stretching right across the equator between West Africa and Brazil also known as the Great Atlantic Sargassum Belt. Additionally, sargassum grows faster due to more nutrients (pollution from logging, fertilizer and urbanization) as well as increases in floods.

The Impacts of Sargassum



Tourism

Sargassum smothers beaches, inhibits swimming, affects water sports and ultimately rots. Removal activity can be very disruptive.



Fisheries

It affects boat access gears and fish catches.



Health

Sargassum releases hydrogen sulfide giving off the scent of rotten eggs and posing health risks.



Environment

It chokes and smothers coral reefs and kills wildlife such as turtles.



Maritime Shipping

Ships and boats may find it difficult to navigate through thick mats of sargassum which affects the engines.



Finances

Loss of earnings in the tourism sector, the fisheries sector, costs incurred through clean up in addition to the loss of property value and ecosystem services.

Impacts on the Fisheries Sector

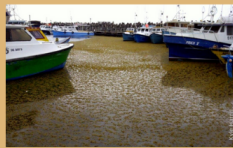
Significant Challenges at Landing Sites

- Boat access becomes very difficult.
- Boats become hard to maneuver.



Significant Challenges at Sea

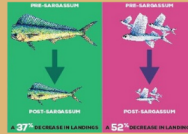
- Fishing gear becomes ineffective or difficult to use.
- Engines begin to overheat due to blocked openings.
- Loss of speed and steering because of fouled propellers and rudders.



Fishing Disruptions

- Fewer days at sea, resulting in lower catches.
- Fish behaviour changes as a result of sargassum influx.
- Target species changes.

Impacts on Fish Catches



Sargassum has affected fish catches in both Dolphinfish and flying fish with a 37% & 52% decrease in landings respectively.

Socio-Economic Challenges

- Market changes (higher prices, new species, changing seasons)
- Loss of earnings in harvest and post-harvest sectors.
- Profits become lower as maintenance and fuel costs increase while catch quantity decreases.



The Potential Uses of Sargassum

Sargassum has been a plague to the region's maritime activities, however, it still holds the potential to offer revenue earning opportunities for coastal communities. Harvesting sargassum and applying varying levels of processing could also see the once pest transformed into an input for various final goods. Some opportunities for sargassum use are as follows:

- Biofuel
- Agriculture Fertilizers
- Animal & Fish Feed
- Personalized Hair Care Products
- Building Materials



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What is the role of CC4Fish?

CC4Fish has played a supporting technical role by developing the following:

- A prediction model for sargassum
- A quarterly sargassum outlook bulletin
- A study on the impacts of sargassum on key fish species
- The Best Practices Guide for fisherfolk coping with Sargassum
- A Sargassum Uses Guide
- Sargassum Management Plans

